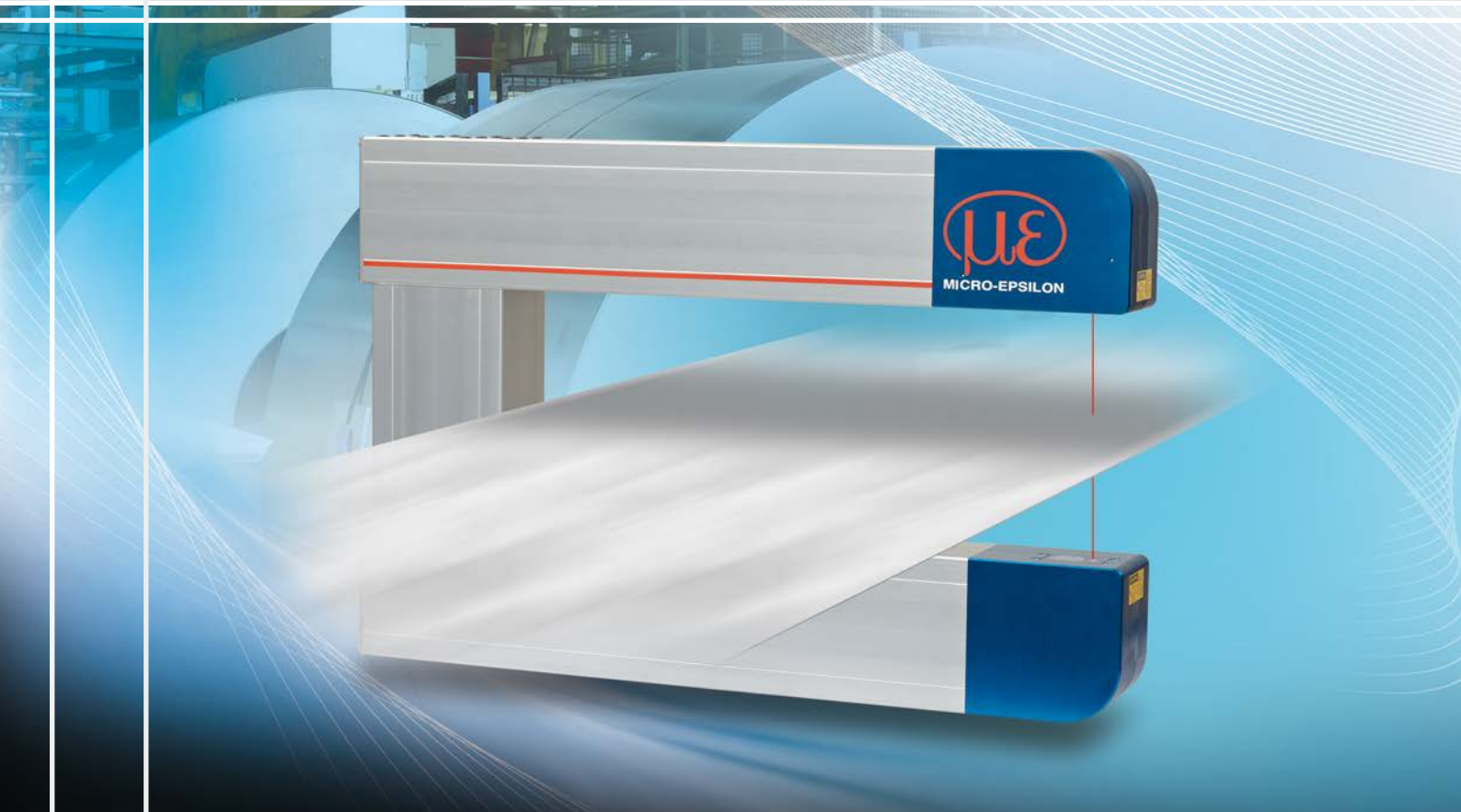




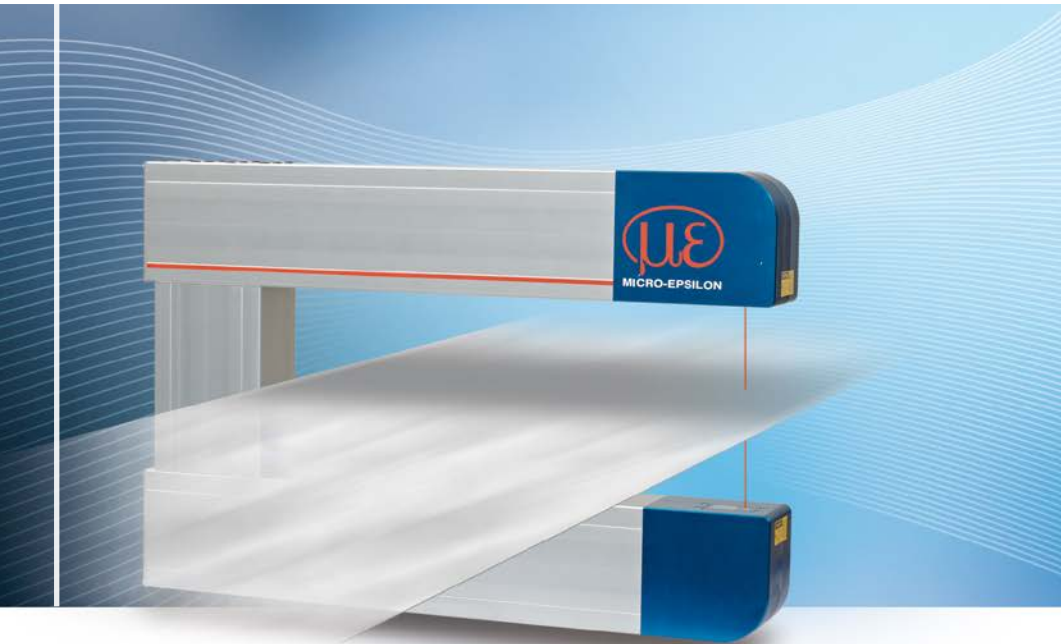
# More Precision

thickness**CONTROL** MTS 7202.T // Non-contact thickness measurement



## Non-contact thickness measurement of metal strips

## thicknessCONTROL MTS 7202.T



- Independent due to material and alloys
- Easy to install
- No IPC necessary
- No isotopes or X-rays
- Control of several measuring systems with only one terminal

### thicknessCONTROL MTS 7202.T

thicknessCONTROL MTS 7202.T is a robust turnkey C-frame for thickness profile measurement in the metal industry. The series offers two different precision classes, both based on the laser triangulation technology, and comes with several measuring ranges and two measurement widths. The system is equipped with Micro-Epsilon optoNCDT LL (laser line) sensors, where the oval point-shaped laser beam is widened to a small line via a special cylindrical lens. The received reflected light is averaged using a special software algorithm. The interference caused by shiny metal is completely filtered out.

thicknessCONTROL MTS 7202.T works with a controller calculating and displaying the measured values. The multicolour display with backlighting changes its color when the limit value is exceeded while a signal is displayed. All user-selectable controller functions and measured data can be viewed, displayed and stored in real time via a web browser without installing any 3rd part software. It is modular upgradable with additional I/O modules for customer-specific requirements.

thicknessCONTROL MTS 7202.T is installed on a linear guidance and can be positioned manually to the measurement point. For a fully automated measurement process with iterative calibration to compensate thermal effects, the linear guidance can be automated and upgraded with a DC-motor.

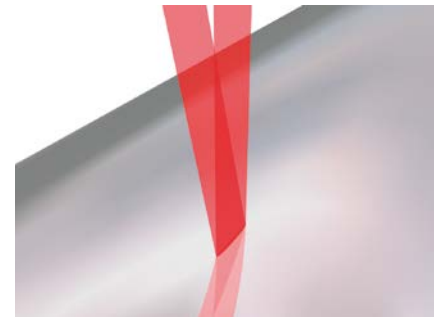
### Potential applications

Thickness profile measurement in

- Hot and cold rolling
- Splitting lines
- Coating
- Casting
- Cutting

### Material parameters

- Material width to 500mm
- Material thickness < 1mm to 50mm
- System resolution  $\geq 0.06\mu\text{m}$
- System accuracy  $\geq \pm 1.2\mu\text{m}$



### optoNCDT LL Laser Line Technology

The optoNCDT LL makes reliable measurements on shiny metallic objects thanks to a small laser line. The oval point-shaped laser beam has now been widened using a special cylindrical lens and projected onto the target. The light spot is absorbed by a receiving array and evaluated. As the light spot is averaged using a special software algorithm, interference is completely filtered out.

## thicknessCONTROL MTS 7202.T AP (Advanced Precision)

Description	-2/250	-10/250	-20/250	-50/250	-2/500	-10/500	-20/500	-50/500
Article No	4350127.01	4350127.02	4350127.03	4350127.04	4350127.05	4350127.06	4350127.07	4350127.08
Laser class	2M							
Measuring width	250mm				500mm			
Working gap	30mm	44mm	70mm	115mm	30mm	44mm	70mm	115mm
Measuring gap	2mm	10mm	20mm	50mm	2mm	10mm	20mm	50mm
Accuracy	$\pm 1.2\mu\text{m}$	$\pm 2.6\mu\text{m}$	$\pm 6\mu\text{m}$	$\pm 14\mu\text{m}$	$\pm 1.2\mu\text{m}$	$\pm 2.6\mu\text{m}$	$\pm 6\mu\text{m}$	$\pm 14\mu\text{m}$
Resolution	$0.06\mu\text{m}$	$0.18\mu\text{m}$	$0.45\mu\text{m}$	$1.1\mu\text{m}$	$0.06\mu\text{m}$	$0.18\mu\text{m}$	$0.45\mu\text{m}$	$1.1\mu\text{m}$

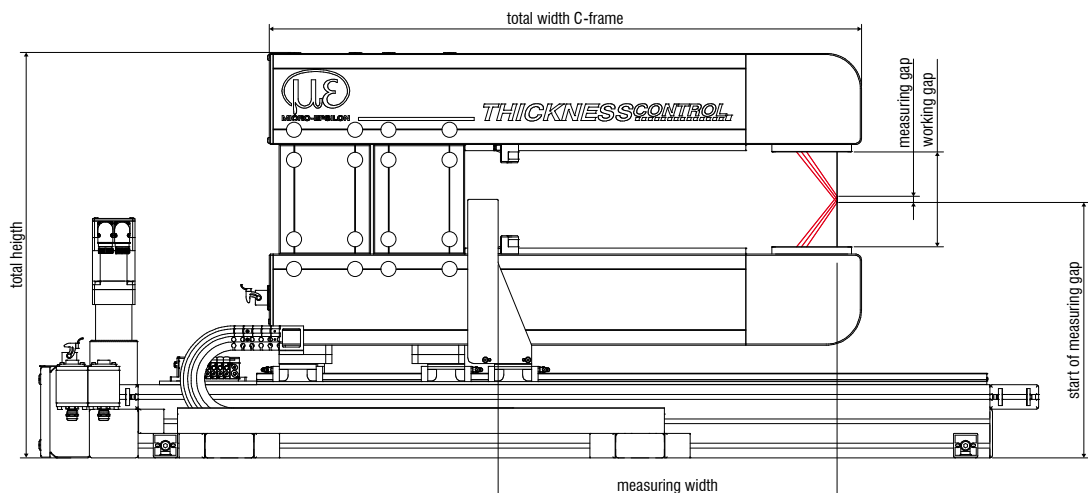
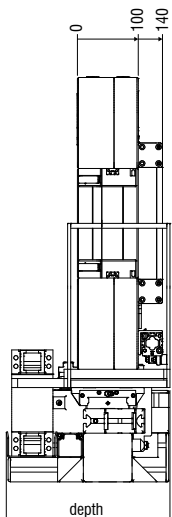
## thicknessCONTROL MTS 7202.T

Description	-2/250	-10/250	-20/250	-40/250	-2/500	-10/500	-20/500	-40/500
Article No	4350127.11	4350127.12	4350127.13	4350127.14	4350127.15	4350127.16	4350127.17	4350127.18
Laser class	2M							
Measuring width	250mm				500mm			
Working gap	30mm	44mm	70mm	235mm	30mm	44mm	70mm	235mm
Measuring gap	2mm	10mm	20mm	40mm	2mm	10mm	20mm	40mm
Accuracy	$\pm 4\mu\text{m}$	$\pm 10\mu\text{m}$	$\pm 24\mu\text{m}$	$\pm 48\mu\text{m}$	$\pm 4\mu\text{m}$	$\pm 10\mu\text{m}$	$\pm 24\mu\text{m}$	$\pm 48\mu\text{m}$
Resolution	$0.2\mu\text{m}$	$0.6\mu\text{m}$	$2\mu\text{m}$	$5.5\mu\text{m}$	$0.2\mu\text{m}$	$0.6\mu\text{m}$	$2\mu\text{m}$	$5.5\mu\text{m}$



**LASER RADIATION**  
Do not stare into the beam  
CLASS 2 LASER PRODUCT  
IEC 60825-1: 2008-05  
 $P \leq 1\text{mW}$ ;  $\lambda = 670\text{nm}$

IEC - Standard



## High performance sensors made by Micro-Epsilon



Sensors and systems for displacement and position



Sensors and measurement devices for non-contact temperature measurement



2D/3D profile sensors (laser scanner)



Optical micrometers, fiber optic sensors and fiber optics



Color recognition sensors, LED analyzers and color online spectrometer



Measurement and inspection systems

